

## Abstract

An optical packet node for receiving and transmitting optical packets is presented, which comprises: a multiwavelength band splitting device for splitting received optical packets transmitted via multiwavelength bands into at least three groups, each group including one multiwavelength band, a multiwavelength band combining device for combining said at least three groups of multiwavelength bands, at least two optical packet add drop multiplexers, each optical packet add drop multiplexer being placed between said multiwavelength band splitting device and said multiwavelength band combining device, and each optical packet add drop multiplexer serving to add and to drop at least one individual wavelength to a respective group of a multiwavelength band, and a load balancing stage being connected to at least two of said optical packet add drop multiplexers, to provide an interconnection between at least two wavelength bands.